New Hampshire Electric Cooperative, Inc. Minutes of the Meeting of the Engineering and Operations Committee

Teams Meeting

October 7, 2025, 9:00am

Present: Committee Members: Tom Mongeon (Chair), Pat Barbour, Bill Darcy, John Goodrich,

Harry Viens, Bob MacLeod

Other Board Members: Peter Laufenberg, Jerry Stringham

NHEC Employees: Michael Jennings, Josh Mazzei, Luke Croteau, Kristen Taylor, Brittany L'Heureux, Olivia Hicks, Jeremy Clark, and Christine Parent (Recording)

Others Present: NA

Meeting Called to Order

Chair Mongeon called the meeting to order at 9:00 a.m.

Agenda Review/April Meeting Recap

Chair Mongeon added to the agenda that after the Capital Construction Budget is presented, there will be an assessment from the committee as to whether or not to recommend approval of this budget to the full Board at the next Board meeting.

Chair Mongeon shared a recap of the April meeting:

- Charter Review B-2 and B-10
- Safety Update 2024 Statistics and 2025 Initiatives
- Capital Construction Budget 2024 Yead End Results and 2025 Updates
- 2024 Reliability SAIDI, CAIDI, and SAIFI
- Engineering Brief PUC and Line Losses

Overview of NHEC Power Systems

Mr. Mazzei presented an overview of NHEC power systems. He shared an illustration of a typical electric grid, showing the flow of power.

- About NHEC
 - Service territory approximately 1/3 of NH, all or part of 118 towns in 9 out of 10 counties
 - o 2nd largest electric utility in NH and largest cooperative in New England

o Miles of line: 6,000

Substations: 43 locations

o Demand: 175+ MW

- Transmission and generation
 - o ISO-NE The RTO for 6 New England states
 - Responsible for operating the wholesale power market

- Operates the high voltage transmission network
- Administers planning studies

Discussion

- Mr. Goodrich asked if NHEC is the second largest in terms of MW hours sold. Mr. Mazzei replied NHEC is the second largest in overall size in terms of customers. Eversource has a little under 600,000, and NHEC is the next largest.
- Mr. MacLeod referenced an email Mr. Darcy sent out about RTOs and a letter that Mr. Dwyer sent to Senator Shaheen and asked if there is a controversy over the RTO and if there is a better way to do it.
 - o Mr. Jennings replied that yes, there is controversy around the ISOs and the RTOs and how they manage it. They were originally designed as financial mechanisms to foster competition in electricity sales, but each region developed its own FERC-approved rules, which lead to ongoing skepticism about fairness, cost distribution, and effectiveness, as the system continues to evolve.
 - Mr. Mongeon added RTOs now oversee power market administration, transmission-level dispatch, and future planning, responsibilities that were historically managed by Local Control Centers (LCCs), such as Eversource in New Hampshire, reflecting a shift driven by reliability concerns like brownouts and evolving operational models.
 - o Mr. Jennings added we also take service from National Grid transmission facilities.

Proposed 2026-2028 Capital Construction Budget

Mr. Mongeon introduced Mr. Croteau and stated that the Board's responsibility here is, per Charter B2, attachment C, to provide oversight regarding making the proper investments into infrastructure for our members, not only in the short-term, but in the long-term. Mr. Croteau will point out what drives the review and the recommendations for improvements and additions.

Mr. Croteau began his presentation by reviewing 2025 spending and projections through the end of the year. He stated the goal for today is to receive approval and recommendation from the Committee for the proposed budget.

- CCB Budget vs. Actuals, 2021-2025
 - Approved budgets from 2021 to 2025 against actual spending
 - 2021 was under in actual spending due to supply chain and lead time issues post
 COVID
 - o 2021
 - Budgeted \$17,338,836
 - Actual \$13,823,972
 - o **2022**
 - Budgeted \$17,767,212
 - Actual \$17,333,002
 - o 2023

- Budgeted \$21,838,129
- Actual \$19,895,332
- o **2024**
 - Budgeted \$22,100,273
 - Actual \$20,179,326
- 0 2025
 - Budgeted \$21,656,781
 - Actual (through July 2025) \$9,674,354
- Overall Dollars (2025-2026)
 - o 2025 Budget
 - Recurring \$10,273,000
 - Elective \$11,383,781
 - TRP included in Elective \$6,082,000
 - Total CCB \$21,656,781
 - o 2025 Projected Year End (based on spending through July 2025)
 - Recurring \$12,629,692
 - Elective \$8,921,799
 - TRP included in Elective \$6,100,000
 - Total CCB \$21,551,491
 - o 2026 Budget
 - Recurring \$10,658,000
 - Elective \$12,560,132
 - TRP included in Elective \$7,140,132
 - Total CCB \$23,218,132
- 2026 Recurring Spending
 - Historical
 - Recurring accounts are predicted based on historical spending
 - Dollars are adjusted for known projects (i.e., carryover from 2025 to 2026 for outstanding orders)
 - Trends are considered
 - New Lines New Consumers
 - Decrease in NHEC costs for new lines and new consumers due to change in allowances for new construction that allows us to recover more of those costs from the member. We've been seeing increases in material costs due to inflation and other factors, and we've also been seeing a general trend upward.
 - Allowance is \$2400 for overhead services and member is responsible for remaining cost.
 - Transformers
 - Upward trend due to material cost increases and lengthened

- lead times.
- Some padmount orders are still pending, and there are industry-wide concerns due to demand outpacing the supply
- Transformer Cost Increases from 2020 to 2025 showed increases ranging from 124% to 207%.
- Site Specific Ordinary Replacements
 - Equipment that is replaced in kind due to failure, damage or condition
 - Trend has been upward due to rising cost of material, upgrade and expansion of our system, and storms

o Projections

- Recurring Categories
 - Meter and transformer figures are based on expected orders and deliveries in 2026. Several padmount orders are yet to be fulfilled.
 - Increase in transformer budget due to cost increases.
 - Stabilizing 0100 and 0602 due to member contributions.
 - Pole Replacement Program (600-PR) was increased in 2026 to address backlog of failed poles from testing. 2025 pole testing also included island poles.
 - Total projected 2026 recurring spending \$10,658,000
- 2026 Elective Spending
 - Projects that we've identified such as line upgrades, and substation upgrades to benefit our membership and strengthen our system.
 - \$12,560,132 budgeted in 2026
 - Priority Order
 - Current Issues > Load Driven Projects (Capacity & Voltage) > Reliability
 - o Data driven
 - System model
 - Long-term study
 - Reliability analysis
 - Key Items
 - Transformer Replacement Plan \$7,140,132
 - SCADA Expansion \$500,000
 - o Line Conversions \$2,000,000
 - Proposed Elective Spending 2026 by Category
 - o Transformer Replacement Program 56.8%
 - Line Conversions 15.9%
 - System Improvements 11.9%
 - o SCADA 4.0%
 - Line Conversions (0300)

- Distribution line projects identified by engineering to strengthen the NHEC grid
- Many projects identified from the NHEC 10-year long-range planning study
 - Most recent study was performed in 2022
 - Next update should be in the 2026-2027 timeframe
- \$2.0 million total for all projects
 - Load balancing (adding phases)
 - Overloads (reconductoring)
 - Low voltage (adding phases or reconductoring)
 - Voltage conversions (upgrade 2.4kV to 7.2kV
- System Improvements (1600)
 - Projects varying in size to enhance reliability on NHEC circuits
 - o Driven from an analysis of reliability data
 - Outage management system collects data on past outages
 - Emphasis on prioritizing projects that provide the most member minutes saved for the lowest cost
 - \$1.5 million total for all projects
 - Overhead to underground (ex. FEMA mitigation)
 - Relocating line from offroad to be roadside
 - Bare wire to tree wire
- Transformer Replacement Program
 - o Tuftonboro completed in 2025
 - o Waterville expected to be completed by end of 2025
 - Center Harbor and Bartlett scheduled for 2026
 - Control houses and transformers ordered due to significant lead times (1 year +)
 - Station transformers prioritized for replacement based on asset age and condition, loading, and availability of backup sources/circuit ties
 - Recent bidding process (May 2025) showed we are getting favorable pricing, terms, and lead time with our current preferred vendor
 - o 2026 Budget \$7,140,132 Center Harbor, Bartlett, Alton
 - 2027 Budget \$6,227,927 Alton, Sunapee, Lee
 - 2028 Budget \$5,836,416 Lee, Intervale
 - Current proposed plan, subject to change based on system need
- New Mobile

- Necessary for maintenance and unplanned system events
- Delivery delay due to manufacturer (overweight)
- o Expected delivery in Q4 2025
- Manufacturer responsible for associated cost

SCADA Expansion

- Adding communications between devices on our system and our Control Center. This allows our operators to control devices remotely and receive a whole host of system data, voltage, current, etc., and expands their visibility into what is going on the grid.
- o 2022 Plymouth complete
- o 2023 Meredith & Ossipee complete
- o 2024 Raymond & Alton complete
- o 2025 Raymond, Andover, Conway
- o 2026 Conway, Sunapee, Colebrook
- o After 2026 SCADA expansion will continue
- DMS (Distribution Management System) automated restoration

• 2025 Direct Buried Replacement

- Ongoing initiative to replace primary direct buried cable with new underground cable and conduit
- o \$2.4 million invested in 2025
- 7 projects across the state on track for November completion
- o 16,700 feet (3.2 miles) of new cable installed
- Money is not included in the capital construction budget totals presented, but there is a small amount in the CCB to address failures of direct buried cable that are outside of the formal project
- 2026-2028 Proposed Budget Summary
 - o 2026 Budget
 - Recurring \$10,658,000
 - Elective \$12,560,132
 - TRP dollars included in Elective \$7,140,132
 - Total CCB \$23,218,132
 - o 2027 Budget
 - Recuring \$10,977,740
 - Elective \$11,057,927
 - TRP dollars included in Elective \$6,227,927
 - Total CCB \$22,035,667
 - o 2028 Budget

- Recurring \$11,307,072
- Elective \$ 10,962,766
 - TRP dollars included in Elective \$5,836,416
- Total CCB \$22,269,838
- Capital Construction Budget Summary (\$M)
 - **2026**
 - Recurring \$10.66, O&M Impact \$1.24
 - Elective \$12.56, O&M Impact \$1.46
 - Total CCB \$23.22, O&M Impact \$2.70
 - o \$2.70M of O&M represents 3.4% of 2025 distribution revenue
 - **2027**
 - Recurring \$10.98, Cumulative O&M Impact \$2.51
 - Elective \$11.06, Cumulative O&M Impact \$2.74
 - Total CCB \$22.04, Cumulative O&M Impact \$5.25
 - **2028**
 - Recurring \$11.31, Cumulative O&M Impact \$3.82
 - Elective \$10.95, Cumulative O&M Impact \$4.01
 - Total CCB \$22.26, O&M Impact \$7.84
 - O&M Impact/ Cumulative O&M Impact Estimated annual income statement/rate impact (interest, tax, depreciation) once completed/capitalized

Discussion

- Mr. Darcy stated that the general tendency is that the actual budgeted numbers usually exceed the actual numbers, due to changes in personnel, storm events and time delays.
 He added that the difference between the budget and actual expenditure is \$7.8 million and averaged over those four full years is \$1.95 million per year. Mr. Darcy suggested looking at the transformer replacement project and various individual decisions to make a gross adjustment and then let staff determine what is best in the interest of reliability.
 - o Mr. Jennings replied that the transformer replacement program began in 2021 with delayed costs due to lead times, and although an increased budget was authorized in 2023 to account for rising material costs, it wasn't ultimately needed. This highlighted how project authorizations are structured as "not-to-exceed" plans that may shift due to permitting, easements, or timing challenges.
 - Mr. Darcy suggested the Board authorize projects, but for budgeting purposes, consider expectations and experience to make judgements about what to include in the budget.
 - Mr. Jennings replied that the only challenge with that is from an operational perspective we would be trying to manage a reduced budget, because we don't want to exceed the capital construction budget.
 - o Mr. Mongeon replied we've been within plus or minus 10%, so he follows what Mr.

- Jennings is saying and suggested to Mr. Darcy this be discussed in a broader budget discussion for next year.
- Mr. Darcy replied that is what he would like to see happen. He suggested giving guidelines to reduce the budget by but allow staff to determine where to make changes.
- Mr. Clark added that the capital budget impacts operating expenses and rates, but due to overestimating property tax effects, especially when assets aren't capitalized within the budget year, efforts are underway to adjust budgeting and reduce rate impacts wherever possible.
- o Mr. Goodrich asked if projects not completed in one year carry over to the next year's budget. Mr. Croteau answered that yes, projects are spread out over multiple years, whether planned or unplanned. Mr. Jennings added there is not a separate bucket of money we carry over.
- Mr. Stringham stated there is probably another way to handle the expected lapse in the capital budget rather than building it in, and he shares Mr. Jennings' concern with trying to manage to the lapse whereas in the operational side it's more seamless.
- o Mr. Laufenberg asked where the surplus appears and if it gets rolled over to the next year. Mr. Clark replied from a rates perspective, if we don't spend the capital, it's not capitalized, therefore, you're not going to see the depreciation, interest and property tax expenses. That would improve the margin for that year. As it relates to a capital project not being completed that year, it will be put into the next year's capital budget, so it still has the authorization.
- Mr. Mongeon asked Mr. Darcy to think of a specific recommendation, suggestion or challenge for staff to reduce the budget. Mr. Darcy agreed.
- Mr. Goodrich asked if we are in line with what other utilities do regarding a cap charge on new lines. Mr. Jennings replied that investor-owned utilities are regulated by the PUC, but a lot of other cooperatives are moving to 100% contribution model. The other side of that argument is that it's not very cooperative to do that since everyone shares the cost of the system. There are pros and cons, but we have struck a good middle ground.
- Mr. Mongeon asked if both padmount and pole top transformers are included in the transformer spending slide. Mr. Croteau responded that is correct.
- Mr. Mongeon asked if we anticipate a large spike in having to replace transformers due to age. Mr. Croteau responded he would have to look at the fleet to see if there are any clusters as far as age, but to the best of his knowledge, they are pretty well distributed. Mr. Mongeon replied that it would be good to take a look to see if clusters exist and to see what the value of all of our transformers is. Mr. Jennings replied that we could easily look at what our book value after depreciation is, but we don't have historical data on some of the older transformers. Mr. Mongeon stated we might want to look into listing infrastructure-related items with a specific plan based on ages, to include transformers, reclosers, sectionalizers, cap banks, etc. This would help the Board understand the overall asset base and expected

- cluster of future expenses. Mr. Jennings replied it makes sense, but his concern would be the cost of the data analysis. Mr. Mongeon stated it was not a request, he is just adding that as they consider different data needs.
- Mr. Darcy asked how much of the transformer increase was caused by the increase in cost, increase in transformers we are replacing, or if we are pre-ordering due to supply constraints. Mr. Croteau responded it was due to cost increases, lead times, and preordering.
- Mr. Darcy noted the Transformer Cost Increases slide is something members should see to get a sense of the increases NHEC faces that cause an increase in rates.
- Mr. Goodrich noted the plants he manages, which deliver 80% of all the insulation used in North America for electrical transformers, are allocating to the 12 largest customers, and the leftovers go to anybody, demonstrating why prices are up so much. He asked if we have any PCB contaminated pole tops. Mr. Jennings replied that we do run into poles that contain PCBs, and we have a good process in place to properly dispose of and recycle those, as well as a hazard mitigation in case one ever leaks in the field. Mr. Jennings added we have not presented a PCB replacement program like some other utilities as far as he is aware.
- Mr. Mongeon asked what caused the huge increase in transformer demand. Mr. Goodrich
 replied data centers have been a big driver, as well as electric cars and depreciation that
 was not kept by a lot of utilities until recently. Mr. Jennings added that the low interest rates
 caused IOUs to spend a lot and combined with the restricted access to the raw materials, it
 compounded over time.
- Mr. Mongeon asked why the co-op doesn't have a program to address PCBs. Mr. Jennings
 replied that he's not sure if it's ever been presented due to the return on equity. He has
 seen these programs undertaken by IOUs more than cooperatives, so there's a different
 financial driver for it. The lack of historical data handicaps us, because there would need to
 be a big expenditure operationally to get the needed data, and then a big capital
 expenditure to do the replacements.
- Mr. Mongeon asked which of the data driven model studies are done by an external agency, such as PSE. Mr. Croteau replied we have external vendor, PSE, perform long-term studies. Mr. Croteau added that the major data input for that study is the NHEC system model, which we own and maintain based on our line data, conductor data and circuit arrangements. That information is based on GIS, which is imported into a modeling software program that we use for our own system studies. Our engineers are very familiar with the model, making updates and analyzing projects that are identified from the long-term plan to help prioritize and determine what is most critical. Mr. Mongeon asked if we are using Milsoft software. Mr. Croteau replied Milsoft is what we are using.
- Mr. Mongeon asked when there is new generation, distributed solar, for example, when we
 perform a system impact study does that information get added real time or every six
 months or so to our model. He also asked if we foresee a point where distributed
 generation could cause a major impact to our system requiring changes as we acquire the

new distributed generation. Mr. Croteau replied to the first question that yes, we do have a process by which new locations or new distributed generation is interconnected to the system. It automatically propagates to our GIS system, then periodically pushed into our system modelRegarding the second question, Mr. Croteau stated that we look at the system on a site-by-site basis, especially for the larger DG installations, what upgrades need to occur to maintain quality of service to all the membership. We monitor voltage impacts and load restraints and look at different parts of the system and the upgrades needed in those areas.

- Mr. Mongeon stated the TRP is going for several more years and asked if SCADA is close to wrapping up. Mr. Croteau stated that is correct, and he will address those projects in future slides.
- Mr. MacLeod asked from a budget standpoint how much of the \$12.5 million for elective spending do we need to spend. He asked if these projects are something we need to do, something we would like to do or if it is more about prevention. He shared his personal experience that the co-op is increasingly more reliable than when he moved here many years ago, but that we need to remain mindful of the impact on rate increases. Mr. Jennings replied all elective spending is for reliability improvements. It alleviates issues that have been detected, where if we don't fix it, we will spend money on it in the long run anyway and it may cause a safety hazard. The majority of it goes to future reliability improvements, which we prioritize based on being the most cost-effective use of the money to get the best reliability improvement. He stated we could cut back here if needed, but we could also look at going down to one transformer per year for the TRP program. Mr. Jennings added it is something they will want to discuss when they meet later this year.
- Mr. Goodrich stated that the more monitoring we can do to prevent problems is great. He stated the electrical power industry is maybe the most capital-intensive industry, so we will always be on the high side of capital spending.
- Mr. Mongeon stated that we are a little behind schedule, but the CCB is the most important part of the meeting, so, if needed, we will move the Micro Grid portion of the presentation to another meeting. Mr. Croteau agreed and stated he appreciated the great discussions.
- Mr. Darcy asked what bare wire to tree wire means. Mr. Croteau stated that bare wire is exposed conductor and tree wire has a covering, which makes it more resilient if a tree brushes against it, it is less likely to take out the circuit. Mr. Darcy replied he didn't know we had any bare wire. Mr. Jennings stated there is still plenty of it out there.
- Mr. Goodrich asked if we are doing any testing of the gases on the transformers to do predictive maintenance on what might be needed in some of the largest transformers on our grid. Mr. Croteau replied we do, but he will have to circle back to maintenance to determine the details. Mr. Jennings replied the electric shop manages that, and they are moving towards recording those records digitally, which will make them more useful and will trend and track asset health over time, as opposed to paper records we've been maintaining for years. Mr. Goodrich replied that can be a good predictor of trouble as there's usually an indication of transfer insulation breakdown. Mr. Jennings replied we had

- one a few years back that the settling number spiked and we had to replace it. Mr. Mongeon asked if we also do IR scanning. Mr. Jennings replied we do.
- Mr. Darcy requested the TRP chart to show moving the start of the Alton expenditures to 2027 and move the start of the Lee expenditures to 2028. He also noted, for the Board's consideration, a lot of money has been spent on a mobile unit, and we have another mobile unit. While that enhances our reliability, we ought to consider how it affects the timing of other reliability improvements that are elective and very expensive. He stated he would like to see what those changes do to the budget for those three years. Mr. Mongeon replied that Mr. Jennings mentioned we are going to be looking at the whole program and these are good questions and relate to our risk analysis.
- Ms. Barbour asked how nimble the TRP is. For example, stations have been identified, but what happens if a station that wasn't on the radar needs to be addressed. Are parts from one substation generally usable in another one? Mr. Croteau answered that it would depend on the station. Some stations use a similar size transformer, but different stations have different footprints and arrangements. He added that the lead time for a transformer is about a year. It would also depend on where the failure was. It's possible an adjustment could be made, but it would not be easy, given all the planning that goes into taking an outage at a station, dismantling equipment, etc. Ms. Barbour replied this indicates how big of a decision it is which ones are done and when, because there isn't inherent flexibility in the schedule. Once you identify a place, you need to go forward with it, so the identification is very important.
- Mr. Goodrich asked if there is any possibility of a mutual aid agreement with other utilities on use of mobile subs. Mr. Jennings replied it is possible, but the surrounding utilities are very protective of them and do not like to share them. If we had an emergency scenario and Mr. Jennings needed to call in a favor from another utility, he could probably do that, but to get something contractually in writing ahead of time would be very hard to pull off. Mr. Jennings added there was a federal plan to create a large asset shared network across the country, but it didn't work out because folks do not like to share their resources. Mr. Goodrich asked if we could jointly do a mobile with another utility as a shareable asset. Mr. Jennings answered we will be in good shape once the mobile on order is delivered, once they've made the modification, so we won't need to do that.
- Mr. Mongeon asked, when this mobile is delivered, if we will then have two. Mr. Jennings replied we will have three, but one of them is very restricted on its use.
- Mr. Mongeon gave Mr. Darcy the opportunity to put in a request or suggestion regarding the
 proposed 2026 CCB. Mr. Mongeon asked that everyone keep in mind the reality that the
 Board and staff are in the process of evolving the budgeting process in a positive way and
 encouraged that it be addressed in a more holistic approach where we tackle the whole
 budget and make recommendations for the process moving forward.
- Mr. Darcy stated his motion is based on looking at the differences between our budgeted figures and the expenditures over the four full years, the deviation is about \$1.95 million per year. There are a lot of areas where adjustments could be made, and he is suggesting a \$1

million reduction to the proposed budget.

- Mr. Jennings replied that can easily be managed and he is happy to work with the team to
 modify the categories they think would have the least reliability impact and defer that cost
 to future years.
 - Mr. Mongeon asked if the revised proposed budget would be available for the final presentation of the budget.
 - Mr. Jennings replied that they will most likely defer some of the transformer replacement costs because those are hard to quantify in a reliability perspective, because it's more about avoiding future issues.
 - Mr. Darcy clarified the intent of his motion is not to hold Mr. Jennings so early in the process to those judgments, and he wants to allow him some flexibility so if during the year something else happens, it can be addressed.
 - Mr. Stringham added that the proposal suggests establishing an expected lapse account to reflect the typical 10% underspend in the capital budget, allowing for full program budgeting while avoiding systemic overfunding and unnecessary rate impacts.
 - Mr. Darcy agreed and added the proposed number is less than 5%, which is a manageable number and could be the lapse or a specific judgement, and he wants to allow Mr. Jennings flexibility in management of that.
 - o Mr. Jennings replied if we are just talking about an expected lapse, the best way to handle that would be on the O&M side by reducing our taxes, depreciation and interest expenses projected for next year separate from the capital construction budget proposal. If the Board approves a \$22 million capital construction budget, then we typically try to manage and shift projects throughout the year.
 - Mr. Laufenberg asked if the motion passes and the Board approves, does the Board have the ability to increase the amount if needed in the future.
 - Mr. Jennings replied that is correct, but to keep in mind it's like turning around a
 cruise ship. Typically, when something is brought to the Board, it's for a cost we
 haven't had a choice in, such as storm-related expenses. It's hard later in the year
 to say we want to proceed with a reliability project.

Upon motion of Mr. Darcy, seconded by Mr. MacLeod, it was

VOTED That the Committee recommend to the Board of Directors a reduction of \$1 million to the proposed 2026 Capital Construction Budget, bringing the revised total to \$22.22 million.

Vote for the motion was five yes and one abstained. Mr. Mongeon abstained due to not enough data.

2025 Data Analytics

Ms. L'Heureux and Ms. Hicks presented the Data Analytics project

Strategic Plan Initiative

- Implement data analytics and process improvements to identify opportunities and trends that affect reliability within the grid
- Leverage the data and analytics to make decisions about our business that are advantageous to our members
- Project Goal: Improve organizational infrastructure and literacy to improve reliability by enabling teams to make accurate data-driven decisions
 - Objective #1: Identify and implement scalable tool in which data from all potential sources will flow and be housed
 - Objective #2: Create a holistic, yet approachable, documentation set and query list to meet reporting needs across the varied parts of the business
 - Objective #3: Ensure we meet end-users where they are when training

Team Roles

- Executive Sponsor: Brittany L'Heureux
- o Project Manager: Olivia Hicks
- o Technical Team
 - Tasked with finding the solution
 - How are we going to do this?
 - How are we going to do this in a way that is not manual?
- Operational Team
 - Looking at using the data on the staff side
- RACI structure used to define responsibilities

Project Status

- Detailed Project Plan and Charter have been created
- Project Roadmap is on track to be finished by the end of 2025
 - Roadmap draft initiated with the beginning of defined milestones
- Employee discussions and survey underway to guide the final roadmap and training approach
- Data warehouse design process underway
- On track to exit "Planning" phase and move in "Execution" phase at the top of the year as planned
- Upcoming Milestones
 - o Completion of Employee Tour & Survey by end of October
 - Milestone Mapping completed in November
 - Final Roadmap completed by end of December
 - Exit Planning Phase and enter Execution Phase at start of new year
- Reports will be...
 - o Focused to relevant views & information for different jobs
 - Built to help with common tasks
 - o Aimed to make things easier
 - Example Reliability Dashboard shared

Discussion

- Mr. Darcy stated his concern with project goal number one and a subsequent slide which describes a further data warehouse process underway. He asked if we have a solution, and do we know what scalable tool we are looking for. He also asked if it is a manual way in which we're going to conform our data or if we are using Artificial Intelligence. He asked if there is a software solution that we've identified that is going to solve that objective. Ms. L'Heureux replied that we do, and she is going to hand it over to Ms. Hicks to discuss that further.
 - o Ms. Hicks replied that we have identified a data warehousing solution in our existing tools because we have a good existing infrastructure as far as a server environment. We are leveraging our existing SQL server to house a data warehouse. We are not, at this point in time, leveraging AI due to concerns with hallucinations and inaccuracies. They will be automated in their updates and their connections within our systems, but they will be driven by the business question, "what are we solving for, and how do we need to solve for that?". We will build queries around that.
 - o Mr. Darcy stated we have different data in different formats, and he asked how it is going to be consolidated and if Ms. Hicks is saying they are not going to consolidate it, but for particular purposes. He asked what we are doing by querying the data and if that is the method by which we're going to put it all in one place in a common format. He also asked what RACI is.
 - Ms. Hicks replied RACI is a responsibility chart and it stands for responsible, accountable, consulted and informed. It makes sure there is a clean hand off between tasks and everyone understands what they're responsible for as individuals. A data warehouse is what we will be building in SQL, so we are consolidating data.
 - o Mr. Darcy asked what SQL is.
 - Ms. Hicks responded it's a language, a server type. She stated we are building a
 data warehouse, which is consolidated sources of data. By consolidating all these
 sources of data, we can then build interactive reports and dashboards to answer
 the question at hand.
 - Mr. Darcy thanked Ms. Hicks and Ms. L'Heureux for the explanation, and stated he better understands and is reassured that our data is in a format that can utilize those kinds of resources to provide the report.
 - Mr. Jennings gave kudos to Ms. L'Heureux and Ms. Hicks for picking this up from zero halfway through the year. They have laid out a plan on how to execute going forward and have done a fantastic job in a short amount of time.
- Mr. Mongeon stated that he likes that they follow project management discipline.
- Mr. Goodrich asked if the consumer hours listed on the reliability dashboard are total hours. Ms. Hicks replied that it is accumulation, and that more populous places will see higher numbers.

Microgrid Study Update

Mr. Mongeon stated, for the sake of time, that he will check with staff to see if we should send out

further info on the micro grid update or if it makes sense to review at the next E&O Committee meeting

Discussion

- Mr. Darcy stated if Mr. Jennings could post the NRCO study in OnBoard that would be helpful. Mr. Jennings replied that it will be shared.
- Mr. Jennings stated we will be proposing later to the Board, outside of the budget process, a \$1 million plus project for a micro grid. He stated we can do this outside of the budget because the cost savings from implementation should offset the capitalization costs of implementing the battery bank, so it would be at least a net even or savings over time, but that will be left up to the Board. He stated it would not be an increase over what was already authorized.

Closing Remarks

Mr. Mongeon stated that he's attended over nine years of E&O Committee meetings, and this has been the best presentation, discussion, questions, and staff responses to the capital construction budget.

Action Items:

- Mr. Croteau will adjust the TRP chart to reflect moving the start of the Alton expenditures to 2027 and moving the start of the Lee expenditures to 2028.
- Mr. Jennings to post NRCO study to OnBoard.

Adjournment

Chair Mongeon adjourned the meeting at 10:46 a.m.